



**PENDING CLAIMS**

**Clean Versions of Pending Claims under 37 C.F.R. 1.121(c)(3)**

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27. An isolated nucleic acid molecule comprising the nucleotide sequence as set forth in any of SEQ ID NO: 3, SEQ ID NO: 5, SEQ ID NO: 7, SEQ ID NO: 9, SEQ ID NO: 11, SEQ ID NO: 13, SEQ ID NO: 15, SEQ ID NO: 17, SEQ ID NO: 19, residues 4 through 549 of SEQ ID NO: 9, residues 4 through 519 of SEQ ID NO: 15, or residues 4 through 516 of SEQ ID NO: 19.

28. The isolated nucleic acid molecule of Claim 27 comprising the nucleotide sequence as set forth in SEQ ID NO: 9.

29. The isolated nucleic acid molecule of Claim 27 comprising the nucleotide sequence as set forth in SEQ ID NO: 15.

30. The isolated nucleic acid molecule of Claim 27 comprising the nucleotide sequence as set forth in SEQ ID NO: 19.

31. The isolated nucleic acid molecule of Claim 27 comprising the nucleotide sequence as set forth in SEQ ID NO: 5.

32. The isolated nucleic acid molecule of Claim 27 comprising the nucleotide sequence as set forth in SEQ ID NO: 7.

33. The isolated nucleic acid molecule of Claim 27 comprising the nucleotide sequence as set forth in SEQ ID NO: 13.

34. The isolated nucleic acid molecule of Claim 27 comprising the nucleotide sequence as set forth in SEQ ID NO: 11.

35. The isolated nucleic acid molecule of Claim 27 comprising the nucleotide sequence as set forth in SEQ ID NO: 17.

36. The isolated nucleic acid molecule of Claim 27 comprising residues 4 through 549 of the nucleotide sequence as set forth in SEQ ID NO: 9.

37. The isolated nucleic acid molecule of Claim 27 comprising residues 4 through 519 of the nucleotide sequence as set forth in SEQ ID NO: 15.

38. The isolated nucleic acid molecule of Claim 27 comprising residues 4 through 516 of the nucleotide sequence as set forth in SEQ ID NO: 19.

39. The isolated nucleic acid molecule of Claim 27 comprising the nucleotide sequence as set forth in SEQ ID NO: 3.

40. An isolated nucleic acid molecule comprising the nucleotide sequence of SEQ ID NO: 1.

41. An isolated nucleic acid molecule encoding a polypeptide having the ability to bind TNF, wherein said polypeptide comprises the amino acid sequence as set forth in any of SEQ ID NO: 4, SEQ ID NO: 6, SEQ ID NO: 8, SEQ ID NO: 10, SEQ ID NO: 12, SEQ ID NO: 14, SEQ ID NO: 16, SEQ ID NO: 18, SEQ ID NO: 20, residues 2 through 183 of SEQ ID NO: 10, residues 2 through 173 of SEQ ID NO: 16, or residues 2 through 172 of SEQ ID NO: 20; and wherein said polypeptide has:

- (a) at least one conservative amino acid substitution;
- (b) at least one amino acid substitution at a glycosylation site;
- (c) at least one amino acid substitution at a proteolytic cleavage site;
- (d) at least one amino acid substitution at a cysteine residue;
- (e) at least one amino acid deletion;
- (f) at least one amino acid insertion;

- (g) a C- and/or N-terminal truncation; or
- (h) a combination of modifications selected from the group consisting of conservative amino acid substitutions, amino acid substitutions at a glycosylation site, amino acid substitutions at a proteolytic cleavage site, amino acid substitutions at a cysteine residue, amino acid deletions, amino acid insertions, C-terminal truncation, and N-terminal truncation.

42. The isolated nucleic acid molecule of Claim 41, wherein said encoded polypeptide has at least one conservative amino acid substitution.

43. The isolated nucleic acid molecule of Claim 41, wherein said encoded polypeptide has at least one amino acid substitution at a glycosylation site.

44. The isolated nucleic acid molecule of Claim 41, wherein said encoded polypeptide has at least one amino acid substitution at a proteolytic cleavage site.

45. The isolated nucleic acid molecule of Claim 41, wherein said encoded polypeptide has at least one amino acid substitution at a cysteine residue.

46. The isolated nucleic acid molecule of Claim 41, wherein said encoded polypeptide has at least one amino acid deletion.

47. The isolated nucleic acid molecule of Claim 41, wherein said encoded polypeptide has at least one amino acid insertion.

48. The isolated nucleic acid molecule of Claim 41, wherein said encoded polypeptide has a C- and/or N-terminal truncation.

49. An isolated nucleic acid molecule encoding a polypeptide having the ability to bind TNF, wherein said polypeptide comprises the amino acid sequence as set forth in any of SEQ ID NO: 4, SEQ ID NO: 6, SEQ ID NO: 8, SEQ ID NO: 10, SEQ ID NO: 12, SEQ ID NO:

14, SEQ ID NO: 16, SEQ ID NO: 18, SEQ ID NO: 20, residues 2 through 183 of SEQ ID NO: 10, residues 2 through 173 of SEQ ID NO: 16, or residues 2 through 172 of SEQ ID NO: 20.

50. The isolated nucleic acid molecule of Claim 49, wherein said encoded polypeptide comprises the amino acid sequence as set forth in SEQ ID NO: 10.

51. The isolated nucleic acid molecule of Claim 49, wherein said encoded polypeptide comprises the amino acid sequence as set forth in SEQ ID NO: 16.

52. The isolated nucleic acid molecule of Claim 49, wherein said encoded polypeptide comprises the amino acid sequence as set forth in SEQ ID NO: 20.

53. The isolated nucleic acid molecule of Claim 49, wherein said encoded polypeptide comprises the amino acid sequence as set forth in SEQ ID NO: 6.

54. The isolated nucleic acid molecule of Claim 49, wherein said encoded polypeptide comprises the amino acid sequence as set forth in SEQ ID NO: 8.

55. The isolated nucleic acid molecule of Claim 49, wherein said encoded polypeptide comprises the amino acid sequence as set forth in SEQ ID NO: 14.

56. The isolated nucleic acid molecule of Claim 49, wherein said encoded polypeptide comprises the amino acid sequence as set forth in SEQ ID NO: 12.

57. The isolated nucleic acid molecule of Claim 49, wherein said encoded polypeptide comprises the amino acid sequence as set forth in SEQ ID NO: 18.

58. The isolated nucleic acid molecule of Claim 49, wherein said encoded polypeptide comprises residues 2 through 183 of the amino acid sequence as set forth in SEQ ID NO: 10.

59. The isolated nucleic acid molecule of Claim 49, wherein said encoded polypeptide comprises residues 2 through 173 of the amino acid sequence as set forth in SEQ ID NO: 16.

60. The isolated nucleic acid molecule of Claim 49, wherein said encoded polypeptide comprises residues 2 through 172 of the amino acid sequence as set forth in SEQ ID NO: 20.

61. The isolated nucleic acid molecule of Claim 49, wherein said encoded polypeptide comprises the amino acid sequence as set forth in SEQ ID NO: 4.

62. An isolated nucleic acid molecule encoding a polypeptide having the ability to bind TNF, wherein said polypeptide comprises the amino acid sequence of SEQ ID NO: 2.

63. An isolated nucleic acid molecule encoding a polypeptide having the ability to bind TNF, wherein said polypeptide comprises the amino acid sequence of SEQ ID NO: 4 or a C- and/or N-terminally shortened sequence thereof.

64. The isolated nucleic acid molecule of Claim 63, wherein said polypeptide further comprises an amino-terminal methionine.

65. The isolated nucleic acid molecule of Claim 63, wherein said polypeptide comprises a C-terminally shortened sequence of the amino acid sequence of SEQ ID NO: 4.

66. The isolated nucleic acid molecule of Claim 65, wherein said polypeptide further comprises an amino-terminal methionine.

67. An isolated nucleic acid molecule encoding a polypeptide having the ability to bind TNF, wherein said polypeptide consists of the amino acid sequence of SEQ ID NO: 4.

68. An isolated nucleic acid molecule encoding a polypeptide having the ability to bind TNF, wherein said polypeptide consists of the amino acid sequence of SEQ ID NO: 4 and

an amino-terminal methionine.

69. An isolated nucleic acid molecule encoding a polypeptide having the ability to bind TNF, wherein said polypeptide consists of a C-terminally shortened sequence of the amino acid sequence of SEQ ID NO: 4.

70. An isolated nucleic acid molecule encoding a polypeptide having the ability to bind TNF, wherein said polypeptide consists of a C-terminally shortened sequence of the amino acid sequence of SEQ ID NO: 4 and an amino-terminal methionine.

71. The nucleic acid molecule of either Claim 41 or 49, wherein said nucleic acid molecule encodes a polypeptide having at least one additional amino acid at the amino-terminus, at the carboxyl-terminus, or at both the amino-terminus and the carboxyl-terminus.

72. The nucleic acid of Claim 71, wherein said nucleic acid molecule encodes a polypeptide having at least one additional amino acid at the amino-terminus.

73. The nucleic acid of Claim 72, wherein said nucleic acid molecule encodes a polypeptide having a methionine at the amino-terminus.

74. The nucleic acid of Claim 71, wherein said nucleic acid molecule encodes a polypeptide having at least one additional amino acid at the carboxyl-terminus.

75. A nucleic acid that hybridizes to the complement of the nucleic acid molecule of Claim 40 at 65°C in a hybridization buffer comprising 6x SSC and 0.1% SDS.

76. A vector comprising the nucleic acid molecule of any of Claims 27, 41, 49, 63, 64, or 68.

77. A vector comprising the nucleic acid molecule of Claim 27.

78. A vector comprising the nucleic acid molecule of Claim 41.
79. A vector comprising the nucleic acid molecule of Claim 49.
80. A vector comprising the nucleic acid molecule of Claim 63.
81. A vector comprising the nucleic acid molecule of Claim 64.
82. A vector comprising the nucleic acid molecule of Claim 68.
83. The vector of Claim 76, wherein said vector is an expression vector.
84. The vector of Claim 83, wherein said nucleic acid molecule comprises promoter DNA.
85. The vector of Claim 76, wherein said vector is replicable in a prokaryotic cell.
86. The vector of Claim 85, wherein the prokaryotic cell is *Escherichia coli*.
87. A vector comprising the nucleic acid molecule of Claim 66.
88. A vector comprising the nucleic acid molecule of Claim 70.
89. The vector of Claim 76, wherein said vector is replicable in a eukaryotic cell.
90. The vector of Claim 89, wherein the eukaryotic cell is a mammalian cell.
91. The vector of Claim 90, wherein the mammalian cell is a Chinese Hamster Ovary cell or a COS cell.

92. A vector that is replicable in a Chinese Hamster Ovary cell, and wherein said vector comprises the nucleic acid molecule of Claim 62.

93. A vector that is replicable in a Chinese Hamster Ovary cell, and wherein said vector comprises the nucleic acid molecule of Claim 65.

94. A vector that is replicable in a Chinese Hamster Ovary cell, and wherein said vector comprises the nucleic acid molecule of Claim 67.

95. A vector that is replicable in a Chinese Hamster Ovary cell, and wherein said vector comprises the nucleic acid molecule of Claim 69.

96. The vector of Claim 89, wherein the eukaryotic cell is a yeast cell.

97. A recombinant host cell comprising the vector of Claim 76.

98. A recombinant host cell comprising the vector of Claim 87.

99. A recombinant host cell comprising the vector of Claim 88.

100. A recombinant host cell comprising the vector of Claim 92.

101. A recombinant host cell comprising the vector of Claim 93.

102. A recombinant host cell comprising the vector of Claim 94.

103. A recombinant host cell comprising the vector of Claim 95.

104. A recombinant host cell comprising the recombinant nucleic acid molecule of any



of Claims 27, 41, 49, 63, 64, or 68.

105. The recombinant host cell of Claim 104, wherein said recombinant nucleic acid molecule encodes a polypeptide further comprising an amino-terminal methionine.

106. The recombinant host cell of Claim 104, wherein said recombinant nucleic acid molecule encodes a polypeptide comprising the amino acid sequence of SEQ ID NO: 4.

107. The recombinant host cell of Claim 106, wherein said recombinant nucleic acid molecule encodes a polypeptide further comprising an amino-terminal methionine.

108. The recombinant host cell of Claim 104, wherein said recombinant nucleic acid molecule encodes a polypeptide comprising a C-terminally shortened sequence of the amino acid sequence of SEQ ID NO: 4.

109. The recombinant host cell of Claim 108, wherein said recombinant nucleic acid molecule encodes a polypeptide further comprising an amino-terminal methionine.

110. The recombinant host cell of Claim 104, wherein said recombinant nucleic acid molecule encodes a polypeptide consisting of the amino acid sequence of SEQ ID NO: 4.

111. The recombinant host cell of Claim 104, wherein said recombinant nucleic acid molecule encodes a polypeptide consisting of the amino acid sequence of SEQ ID NO: 4 and an amino-terminal methionine.

112. The recombinant host cell of Claim 104, wherein said recombinant nucleic acid molecule encodes a polypeptide consisting of a C-terminally shortened sequence of the amino acid sequence of SEQ ID NO: 4.

113. The recombinant host cell of Claim 104, wherein said recombinant nucleic acid

molecule encodes a polypeptide consisting of a C-terminally shortened sequence of the amino acid sequence of SEQ ID NO: 4 and an amino-terminal methionine.

114. The recombinant host cell of Claim 97, wherein the recombinant host cell is a prokaryotic cell.

115. The recombinant host cell of Claim 114, wherein the prokaryotic cell is *Escherichia coli*.

116. The recombinant host cell of Claim 105, wherein the prokaryotic cell is *Escherichia coli*.

117. The recombinant host cell of Claim 107, wherein the prokaryotic cell is *Escherichia coli*.

118. The recombinant host cell of Claim 109, wherein the prokaryotic cell is *Escherichia coli*.

119. The recombinant host cell of Claim 111, wherein the prokaryotic cell is *Escherichia coli*.

120. The recombinant host cell of Claim 113, wherein the prokaryotic cell is *Escherichia coli*.

121. The recombinant host cell of Claim 97, wherein the recombinant host cell is a eukaryotic cell.

122. The recombinant host cell of Claim 121, wherein the eukaryotic cell is a mammalian cell.

123. The recombinant host cell of Claim 122 wherein the mammalian cell is a Chinese Hamster Ovary cell or a COS cell.

124. The recombinant host cell of Claim 106, wherein the recombinant host cell is a Chinese Hamster Ovary cell.

125. The recombinant host cell of Claim 108, wherein the recombinant host cell is a Chinese Hamster Ovary cell.

126. The recombinant host cell of Claim 110, wherein the recombinant host cell is a Chinese Hamster Ovary cell.

127. The recombinant host cell of Claim 112, wherein the recombinant host cell is a Chinese Hamster Ovary cell.

128. The recombinant host cell of Claim 121, wherein the eukaryotic cell is a yeast cell.

129. The recombinant host cell of Claim 104, wherein the recombinant nucleic acid comprises promoter DNA other than the promoter DNA for SEQ ID NO: 1.

130. The recombinant host cell of Claim 104, wherein the recombinant host cell contains a heterologous promoter operationally linked to a nucleic acid molecule encoding the amino acid sequence of SEQ ID NO: 2, and wherein a translation termination codon is positioned immediately after the asparagine at position 201.

131. A process of producing a recombinant polypeptide having the ability to bind TNF comprising culturing the recombinant host cell of Claim 97 under suitable conditions to express the polypeptide.

132. The process of claim 131, further comprising culturing the recombinant host cell under suitable conditions to amplify the recombinant nucleic acid molecule.
133. The process of Claim 131, wherein the recombinant host cell is a prokaryotic cell.
134. The process of Claim 133, wherein the prokaryotic cell is *Escherichia coli*.
135. The process of Claim 131, wherein the recombinant host cell is a eukaryotic cell.
138. The process of Claim 135, wherein the eukaryotic cell is a mammalian cell.
139. The process of Claim 138, wherein the mammalian cell is a Chinese Hamster Ovary cell or a COS cell.
144. The process of Claim 135, wherein the eukaryotic cell is a yeast cell.
145. The process of Claim 131, wherein said polypeptide is expressed as a multimer.
146. The process of Claim 131, further comprising recovering the polypeptide from the culture.
147. The process of Claim 146, further comprising chemically derivatizing the recovered polypeptide.
148. The process of Claim 146, wherein said recovered polypeptide is formulated to comprise said polypeptide and a pharmaceutically acceptable carrier.
149. The recombinant host cell of Claim 104, wherein the recombinant host cell is a prokaryotic cell.

150. The recombinant host cell of Claim 149, wherein the prokaryotic cell is *Escherichia coli*.

151. The recombinant host cell of Claim 104, wherein the recombinant host cell is a eukaryotic cell.

152. The recombinant host cell of Claim 151, wherein the eukaryotic cell is a mammalian cell.

153. The recombinant host cell of Claim 152 wherein the mammalian cell is a Chinese Hamster Ovary cell or a COS cell.

154. The recombinant host cell of Claim 151, wherein the eukaryotic cell is a yeast cell.

155. A process of producing a recombinant polypeptide having the ability to bind TNF comprising culturing the recombinant host cell of Claim 104 under suitable conditions to express the polypeptide.

156. The process of Claim 155, wherein the recombinant host cell is a prokaryotic cell.

157. The process of Claim 156, wherein the prokaryotic cell is *Escherichia coli*.

158. The process of Claim 155, wherein the recombinant host cell is a eukaryotic cell.

159. The process of Claim 158, wherein the eukaryotic cell is a mammalian cell.

160. The process of Claim 159, wherein the mammalian cell is a Chinese Hamster Ovary cell or a COS cell.

161. The process of Claim 158, wherein the eukaryotic cell is a yeast cell.
162. The process of Claim 155, wherein said polypeptide is expressed as a multimer.
163. The process of Claim 155, further comprising recovering the polypeptide from the culture.
164. The process of Claim 163, further comprising chemically derivatizing the recovered polypeptide.
165. The process of Claim 164, wherein said recovered polypeptide is formulated to comprise said polypeptide and a pharmaceutically acceptable carrier.
166. The process of Claim 163, wherein said recovered polypeptide is formulated to comprise said polypeptide and a pharmaceutically acceptable carrier.
167. The process of claim 155, further comprising culturing the recombinant host cell under suitable conditions to amplify the recombinant nucleic acid molecule.
168. A process of producing a recombinant polypeptide having the ability to bind TNF comprising culturing a recombinant host cell comprising a nucleic acid molecule that encodes a polypeptide consisting of the amino acid sequence of SEQ ID NO: 4 and an amino-terminal methionine under suitable conditions to express the polypeptide.
169. A process of producing a recombinant polypeptide having the ability to bind TNF comprising culturing a recombinant host cell comprising a nucleic acid molecule that encodes a polypeptide consisting of a C-terminally shortened sequence of the amino acid sequence of SEQ ID NO: 4 and an amino-terminal methionine under suitable conditions to express the polypeptide.

170. A process of producing a recombinant polypeptide having the ability to bind TNF comprising culturing a recombinant host cell comprising a nucleic acid molecule that encodes a polypeptide comprising the amino acid sequence of SEQ ID NO: 4 under suitable conditions to express the polypeptide.

171. A process of producing a recombinant polypeptide having the ability to bind TNF comprising culturing a recombinant host cell comprising a nucleic acid molecule that encodes a polypeptide comprising a C-terminally shortened sequence of the amino acid sequence of SEQ ID NO: 4 under suitable conditions to express the polypeptide.

172. A process of producing a recombinant polypeptide having the ability to bind TNF comprising culturing a recombinant host cell comprising a nucleic acid molecule that encodes a polypeptide consisting of the amino acid sequence of SEQ ID NO: 4 under suitable conditions to express the polypeptide.

173. A process of producing a recombinant polypeptide having the ability to bind TNF comprising culturing a recombinant host cell comprising a nucleic acid molecule that encodes a polypeptide consisting of a C-terminally shortened sequence of the amino acid sequence of SEQ ID NO: 4 under suitable conditions to express the polypeptide.

174. The process of any of Claims 168, 169, 170, 171, 172, or 173, wherein the recombinant host cell is a prokaryotic cell.

175. The process of Claim 174, wherein the prokaryotic cell is *Escherichia coli*.

176. The process of any of Claims 168, 169, 170, 171, 172, or 173, wherein the recombinant host cell is a eukaryotic cell.

177. The process of Claim 176, wherein the eukaryotic cell is a Chinese Hamster Ovary cell.

178. The process of Claim 147, wherein said recovered polypeptide is formulated to comprise said polypeptide and a pharmaceutically acceptable carrier.